

**RADIO NETWORK TEST ANALYSIS SYSTEM****ABSTRACT OF THE DISCLOSURE**

Optimization of a cellular network is facilitated by an apparatus that performs drive test measurements of a cellular network to identify co-channel interference. The co-channel interference is identified by measuring the signal strengths at various locations within a cell sector and analyzing the recorded information. A key aspect of the invention is synthesizing the received signals to identify the cellular transmitters originating the signals. If signal energy is detected from more than one cellular transmitter on a single frequency, the co-channel interference is identified. This process is particular well suited within a GSM cellular system by detecting the transmission of forward control channel messages and using the information within the forward control channel messages to identify the origination cellular transmitters.

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